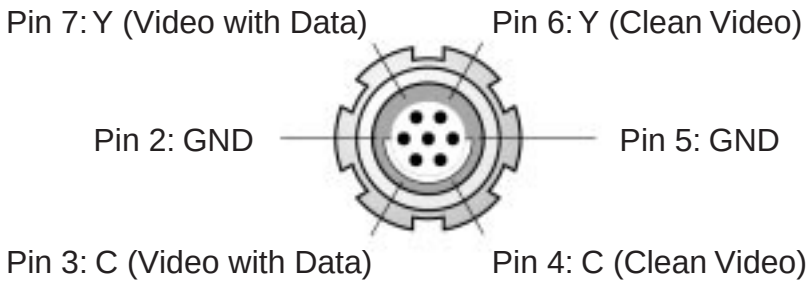
B/W Video on IVS
August 1, 2000

Summary
This note describes how to get a b/w video signal from the ARRI Integrated Video Assist Systems.

The Basic Idea
Even though there is no one button on the ARRI Integrated Video System (IVS) that will turn the output video into black and white (b/w), it is possible to get a b/w signal out of the IVS. This is based on the fact that in addition to the composite video outputs, the IVS also has Y/C video outputs (also called S-Video).
A Y/C video signal consists of two parts: the image luma information (brightness, designated Y) and the image chroma information (color, designated C). The Y portion is basically a b/w version of the image, so if we use only the Y portion of the Y/C signal, we have a b/w image.

IVS for 435
The Y/C output of the IVS for 435 is located underneath the IVS. In order to get a b/w signal, a special cable has to be made from the Fischer 7 pin on the IVS to a BNC connector, utilizing only the Y portion of the image.



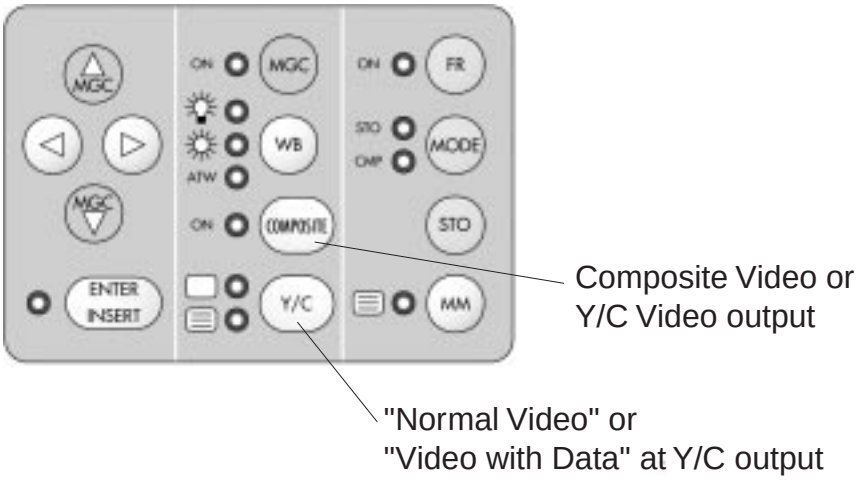
Pin-outs of 435 IVS Y/C connector (seen from outside)

If you do not use the Genlock BNC connector on the IVS for 435 often, you can also have an ARRI service facility wire it up to output the Y portion of the Y/C signal. You will then have a permanent b/w video output on the IVS.

IVS for 16SR 3/535B

The top two BNC connectors on the IVS for 16SR3/535B can either output composite or Y/C video. When the COMPOSITE LED on the IVS control panel (see graphic) is illuminated, the top BNC connector will output composite video, and the next BNC connector down will output composite video with data. Push the COMPOSITE button on the IVS to switch the purpose of those BNC connectors. When the COMPOSITE LED is not illuminated, the top BNC connector outputs the Y portion of the Y/C signal, and the second BNC connector down outputs the C portion. Connect a BNC cable to the top BNC connector and you have a b/w video signal.

Data on/off for Y/C video can be set with the Y/C button that is located next to the COMPOSITE button.



IVS for 535B/16SR3 Control Panel

For more information on this issue, please contact your local ARRI representative.